L5 ANSWER 4 OF 11 CAPLUS COPYRIGHT 2003 ACS
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TITLE: Electroconductive hydrolysis-resistant polyester compositions, monofilaments, industrial fabrics, and their manufacture
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AB The compns. show sp. resistivity .ltoreq.108 .OMEGA.-cm and contain (A) polyesters having 5 equiv/106 g .gtoreq.1 terminal group CO2CH2CH(OX)R and/or CO2CH2CH(OX)CH2OR [R = H, (substituted) N-methylenephthalimide, C1-20 alkyl, (substituted) Ph, cycloalkyl; X = H, **carbodiimide** reaction residue], (B) 0.005-1.5% unreacted **carbodiimides**, and (C) elec. conductors, preferably 4-15% **carbon** black. The compns. are manufd. by kneading polyesters with epoxides I and/or II (R = same as above) and elec. **conductive carbon** black, followed by kneading with **carbodiimides**. Their monofilaments and fabrics are also claimed. Thus, poly(butylene terephthalate), Denacol EX 731, and Ketjen EC (**conductive carbon** black) were kneaded at ratio 87:3:10 and temp. 275.degree., extruded, pelletized, kneaded with N,N'-di-2,6-diisopropylphenylcarbodiimide at ratio 100:1.5 and temp. 280.degree., spun, cooled in a 80.degree.-bath, drawn, and set to give a 0.4 mm diam. monofilament showing sp. resistivity 3.4 .times. 102 .OMEGA.-cm.

IT Electric conductors
(**carbon** black; electroconductive hydrolysis-resistant polyester compns. and monofilaments and industrial fabrics and their manuf.)

IT Nonwoven fabrics
(core-sheath fiber for; electroconductive hydrolysis-resistant polyester compns. and monofilaments and industrial fabrics and their manuf.)

IT Polyester fibers, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(core-sheath, bicomponent; electroconductive hydrolysis-resistant polyester compns. and monofilaments and industrial fabrics and their manuf.)

IT **Carbon** black, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(electroconductive hydrolysis-resistant polyester compns. and monofilaments and industrial fabrics and their manuf.)

IT Polyester fibers, uses
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(fabrics, with terminals modified with **carbodiimides** and epoxides; electroconductive hydrolysis-resistant polyester compns. and monofilaments and industrial fabrics and their manuf.)

IT Polyesters, uses
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(reaction products, with N-glycidylphthalimide and N,N'-di-2,6-diisopropylphenylcarbodiimide; electroconductive hydrolysis-resistant polyester compns. and monofilaments and industrial fabrics and their manuf.)

IT Polyester fibers, uses
Polyesters, uses
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(with terminals modified with **carbodiimides** and epoxides; electroconductive hydrolysis-resistant polyester compns. and monofilaments and industrial fabrics and their manuf.)

IT 2162-74-5DP, reaction products with poly(butylene terephthalate) and N-glycidylphthalimide 5455-98-1DP, reaction products with poly(butylene terephthalate) and N,N'-di-2,6-diisopropylphenylcarbodiimide 7144-65-2DP, reaction products with poly(butylene terephthalate) and N-glycidylphthalimide 24968-12-5DP, reaction products with N-glycidylphthalimide and N,N'-di-2,6-diisopropylphenylcarbodiimide 25038-59-9DP, reaction products with N-glycidylphthalimide and N,N'-di-2,6-diisopropylphenylcarbodiimide 26062-94-2DP, reaction products with N-glycidylphthalimide and N,N'-di-2,6-diisopropylphenylcarbodiimide 66027-02-9DP, reaction products with N-glycidylphthalimide and N,N'-di-2,6-diisopropylphenylcarbodiimide
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(electroconductive hydrolysis-resistant polyester compns. and monofilaments and industrial fabrics and their manuf.)